

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,914	03/16/2005	Rainer Heller	2002P11020WOUS	9070
7590 09/24/2007 Siemens Corporation Intellectual Property Department			EXAMINER	
			WU, JUNCHUN	
170 Wood Avenue South Iselin, NJ 08830			ART UNIT	PAPER NUMBER
			2191	
			MAIL DATE	DELIVERY MODE
			09/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

			4
,	Application No.	Applicant(s)	<u> </u>
	10/527,914	HELLER ET AL.	
Office Action Summary	Examiner	Art Unit	
	Junchun Wu	2191	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D/ - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from , cause the application to become AB ANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).	
Status			
<ul> <li>1) Responsive to communication(s) filed on 16 M</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for alloware closed in accordance with the practice under E</li> </ul>	action is non-final. nce except for formal matters, pro		
Disposition of Claims	•		
4) ☐ Claim(s) 21-41 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 21-41 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	vn from consideration.		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the l drawing(s) be held in abeyance. Ser ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage	
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3/16/2005 & 6/20/2005	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate	

Art Unit: 2191

# **DETAILED ACTION**

1. Claims 1-20 are cancelled.

2. Claims 21-41 are pending in this application.

## Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 4. Claim 21 and 39 are rejected under 35 U.S.C. 101 because claim 21 fails to claim a program or software recorded on a machine-accessible medium so as to be structurally and functionally interrelated to the medium and permit the function of the descriptive material to be realized. Thus, claim 21 and 39 should be rejected as non-statutory.
- 5. Claims 22-28 and 40-41 are dependent of claims 21 and 39 respectively, so they are rejected as the same reasons as above.
- 6. Claims 36-38 are rejected under 35 U.S.C. 101 because claim limitations are directed towards software/code per se. A claim fails to recite any hardware/code features to enable the software to act as a computer component and realize any functionality. The claimed invention is directed to non-statutory subject matter.

Art Unit: 2191

## Claim Rejections - 35 USC § 102

7. Claims 21-25, 27-28, 37 and 39-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Wong-Insley (US Patent No.6, 131,166).

#### 8. Per claim 21

Wong-Insley discloses

A system for providing a device-independent functionality for automation devices, the system comprising:

- in first mechanisms for encapsulating specific functions of at least one automation device and for providing a base functionality of the automation device (col.9 lines 44-51 "In a preferred embodiment, the Java™ application-level power management framework comprises a set of standardized, system-independent system power states, a set of standardized device power states which is inherited from an industry standard, a set of well defined power state transitions, and a set of programming interfaces (i.e., APIS) for power management which provide a channel for applications to participate in power management."; In the object-oriented programming like the Java™, all the variables and methods within an object is referred to as encapsulation.).
- second mechanisms, superimposed on the first mechanisms, for providing a general functionality and/or automation functionality (col.9 line 64 col.10 line 3 "The Java<sup>TM</sup> API 252 comprises all of the API sets available to the applications 232: the Java<sup>TM</sup> Base API 226, optionally the Java<sup>TM</sup> Standard Extension API 230, and additional APIs. The Java<sup>TM</sup> API 252 also encompasses the Java<sup>TM</sup> Power Management API or APIs 262, the

Art Unit: 2191

programming interfaces between applications 232 and the Java™ Virtual machine."; All the APIs provide different functionalities for the devices.).

## 9. Per claim 22

the rejection of claim 21 is incorporated and Wong-Insley discloses

• the first mechanisms are designed as automation-device-specific adapters (col.9 lines 5-8 "The porting interface 220 and adapters 216a, 216b, and 216c enable the Java™ Virtual Machine 222 to be easily ported to new computing platforms without being completely rewritten.").

#### 10. Per claim 23

the rejection of claim 21 is incorporated and Wong-Insley discloses

the second mechanisms are designed so as to be independent of a device (col.16 lines 13-15 "The power management APIs thus enable Java™ application to participate in power management in a standardized, cross-platform manner.").

## 11. Per claim 24

the rejection of claim 21 is incorporated and Wong-Insley discloses

the system is provided for use by a development system for developing control software (col.4 lines 63-66 "As used herein, a programming interface is an application programmer interface or API: a set of routines, protocols, methods, variables, tools, and/or other resources for building software applications.").

Art Unit: 2191

## 12. Per claim 25

the rejection of claim 21 is incorporated and Wong-Insley discloses
the system is provided for providing technological objects for automation devices (col.18 lines
14-17 "There should only be one SystemPowerMonitor object in a system. The constructor of
SystemPowerMonitor, which creates the instance of the sole SystemPowerMonitor object and
prevents the instantiation of another instance").

## 13. Per claim 27

the rejection of claim 21 is incorporated and Wong-Insley discloses

the system is adapted for using the Internet and/or an intranet for transmitting data (col.8 lines 6-8 "Typically, applets are embedded in a Web page, downloaded over the Internet from the server, and run on a client machine.").

## 14. Per claim 28

the rejection of claim 21 is incorporated and Wong-Insley discloses

■ an automation- specifically designed programming language is used for developing control software for the system (col.3 lines 14-16 "In one embodiment, the invention comprises one or more Java<sup>TM</sup> programming interfaces or APIs which permit Java<sup>TM</sup> applications to participate in power management.").

Art Unit: 2191

15. Per claim 37

the rejection of claim 36 is incorporated and Wong-Insley discloses

• the programming language is provided as an intermediate language for automation

languages, as a target language of development systems, and for mapping on to the first

mechanism on an automation device as a target platform (col.3 lines 40-47 "A developer

may map the system-independent power states to the system-dependent power states of

the underlying computer system...").

16. Per claims 39-41

They are automation device claims corresponding to the system claims 21-23

respectively and are rejected the same reason set forth in connection of the rejection of

claims 21-23 above.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the

manner in which the invention was made.

18. Claim26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong-Insley, in

view of Backer et al. (U.S. Pub. No. 20020073094 hereinafter "Backer").

Application/Control Number: 10/527,914

Art Unit: 2191

19. Per claim 26

the rejection of claim 21 is incorporated

But Wong-Insley does not disclose

a memory for storing automation solutions for recurring tasks.

However, Becker discloses

a memory for storing automation solutions for recurring tasks ([0031] "Simple creation of reusable solutions-The developer of the automation solution can create a reusable model

Page 7

by means of visual programming.").

• Therefore, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to modify teaching of Wong-Insley with the teachings of Becker

to include a memory for storing automation solutions for recurring tasks in order to

reduce the maintenance expenditure ([0033]).

20. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong-Insley, in

view of Hammond (U.S. Patent No.6, 336,118 B1).

21. Per claim 38

the rejection of claim 37 is incorporated

But Wong-Insley does not disclose

compilers are provided for mapping the programming language onto the target platform.

However, Hammond discloses

Art Unit: 2191

• compilers are provided for mapping the programming language onto the target platform (col.3 lines 33-36 "The client utilizes the data type defined in IDL through a language mapping. This mapping defines the programming language constructs (data types, classes, etc.) that will be generated by the IDL compiler supplied by an ORB vendor.").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Wong-Insley with the teachings of Hammond to include compilers are provided for mapping the programming language onto the target platform in order to utilize at run time with the assurance that there will be no interaction mismatches (col.3 lines 50-56).

## 22. Per claims 29-36

They are method claims corresponding to the system claims 21-28 respectively and are rejected the same reason set forth in connection of the rejection of claims 21-28 above.

Art Unit: 2191

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junchun Wu whose telephone number is 571-270-1250. The examiner can normally be reached on 8:00-17:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW

WEI ZHEN
SUPERVISORY PATENT EXAMINER

vn N